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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/918,974	07/31/2001	Michael S. Allison	10018221-1	3783

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EXAMINER	
NGUYEN, MINH DIEU T	
ART UNIT	**PAPER NUMBER**
2137	

DATE MAILED: 02/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/918,974	ALLISON ET AL.	
	Examiner	Art Unit	
	Minh Dieu Nguyen	2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 July 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-7,9-11,13-15,18,20 and 21* is/are rejected.

7)☒ Claim(s) *2,8,12,16,17 and 19* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-21 are pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 3, 5-7, 9 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Novoa et al. (6,223,284).

a) As to claim 1, Novoa discloses a method and apparatus for providing a remote flash ROM and security package to be delivered to a system ROM of a target computer system (col. 2, lines 57-61) comprising processing an input file to identify at least one data image for a ROM image build (Fig. 5, element 216) and to generate a token file comprising at least one token for the data image (Fig. 7, element 401); processing the data image with its associated token file to create the data image build; generating a data image build validating signature for the data image build (col. 10, lines 12-16); writing the data image build and the data image build validating signature to the ROM image (col. 10, lines 40-45).

Novoa does not disclose explicitly the step of generating a ROM image validating signature for the ROM image. This step can be implemented based on his teaching of

generating a data image build validating signature for the data image build as addressed above.

It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of ROM validating signature so as to securely verify ROM image.

b) As to claims 3 and 9, Novoa discloses dynamically assigning a starting address for the ROM image to the data image (col. 17, lines 25-30).

c) As to claims 5, Novoa discloses the step of validating the data image build with the data image validating signature comprises using at least one member of a group consisting of a checksum and a cyclic redundancy check to validate the data image build (col. 3, lines 22-25).

d) As to claim 6, Novoa discloses a method and apparatus for providing a remote flash ROM and security package to be delivered to a system ROM of a target computer system (col. 2, lines 57-61) comprising generating a data image validating signature (Fig. 7, element 401) and writing each data image and each data image validating signature to the ROM image.

Novoa does not explicitly disclose processing an input file to generate a token file and a temporary token file and comparing to see if they are the same, then generating a data image validating signature for each data image. These steps can be implemented based on his teaching of comparing if the ROM image filename is correct (Fig. 5A, element 220; i.e. there is no change) then generating a digital signature to the image (Fig. 5A, element 222).

Novoa also does not disclose explicitly the step of generating a ROM image validating signature for the ROM image. This step can be implemented based on his teaching of generating a data image build validating signature for the data image build as addressed above.

It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of ROM validating signature so as to securely verify ROM image.

e) As to claim 7, Novoa discloses generating the token file with a first image identifier and generating the temporary token file with a second image identifier (col. 21, lines 12-29).

f) As to claim 21, Novoa discloses transferring the ROM image from a programming system to at least one member of a group consisting of a ROM, a PROM, an EPROM, and an EEPROM (Title and abstract).

4. Claims 4, 10 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Novoa et al. (6,223,284) in view of Yamada (6,000,005).

Novoa discloses a first data image is assigned a first memory location (col. 23, lines 51-60), however he does not disclose the step of dynamically reassigning the first memory location to a second data image and assigning a new memory location to the first data image.

Yamada discloses a method of writing a flash memory including dynamically switching and allocating memory spaces to the flash memory blocks comprising

dynamically reassigning the first memory location to a second data image and assigning a new memory location to the first data image (Figs 4A/B-7A/B).

It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of dynamically reassigning the first memory location to a second data image and assigning a new memory location to the first data image in the system of Novoa, as Yamada teaches, so as to provide an effective memory assignment.

5. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Novoa et al. (6,223,284) in view of Kohno et al. (6,523,125).

Novoa does not disclose masking the validating signature.

Kohno discloses system and method for providing a hibernation mode in an information handling system comprising masking the signature (col. 4, line 63 to col. 5, line 6).

It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of masking the signature in the system of Novoa, as Kohno teaches, so as to protect information integrity.

6. Claims 13-14 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Novoa et al. (6,223,284) in view of Sinofsky et al. (5,235,551).

a) As to claim 13, Novoa does not disclose the step of looping through each data image to determine if each data image conflicts with at least one member of a

group consisting of a starting address of another data image, a validating signature location of another data image, an address location of another data image and a size location of another data image.

Sinofsky discloses a method for memory addressing scheme for computer system comprising looping through data to determine if there is any conflict with starting address (Fig. 6).

It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of determining any conflicts with starting address of data image in the system of Novoa, as Sinofsky teaches, so as to better control memory assignment.

b) As to claim 14, Sinofsky discloses assigning starting address in the ROM to those data that do not have the starting address (col. 8, lines 39-47).

c) As to claim 18, Novoa discloses a method and apparatus for providing a remote flash ROM and security package to be delivered to a system ROM of a target computer system (col. 2, lines 57-61) comprising identifying a plurality of data images to be placed in the ROM image based upon the inputs from the input file (Fig. 5, element 216); generating a data image validating signature for each data image with each associated input (Fig. 7, element 401); transmitting the data images with the data image validating signatures and the ROM image validating signature to a memory for storage as the ROM image (Fig. 7, element 406).

Novoa does not disclose explicitly the step of generating a ROM image validating signature for the ROM image. This step can be implemented based on his teaching of

generating a data image build validating signature for the data image build as addressed above.

Novoa does not disclose the step of writing each data image and data image validating signature to a starting address of the ROM image, at least one starting address being dynamically allocated.

Sinofsky discloses assigning starting address of font data in ROM and starting address being dynamically allocated (Figs. 3 and 6).

It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of determining any conflicts with starting address of data image in the system of Novoa, as Sinofsky teaches, so as to better control memory assignment.

7. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Novoa et al. (6,223,284) in view of Sinofsky et al. (5,235,551) and further in view of Yamada (6,000,005).

Novoa does not disclose the step of iteratively checking memory locations for an available starting address.

Sinofsky discloses the step of iteratively checking memory locations for an available starting address (as addressed in claim 13).

However, Sinofsky does not disclose the step of unassigning a first memory location assigned to a first data image; reassigning the first memory location to a second data image and reassigning the first data image to a second memory location.

Yamada discloses the step of unassigning a first memory location assigned to a first data image; reassigning the first memory location to a second data image and reassigning the first data image to a second memory location (as addressed in claim 4).

It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of unassigning a first memory location assigned to a first data image; reassigning the first memory location to a second data image and reassigning the first data image to a second memory location in the combination of the system of Novoa and Sinofsky, as Yamada teaches, so as to provide an effective memory assignment.

Allowable Subject Matter

8. Claims 2, 8, 12, 16-17 and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Dieu Nguyen whose telephone number is 571-272-3873. The examiner can normally be reached on M-F 6:00-2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on 571-272-3868. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.

Minh Dieu Nguyen
Examiner
Art Unit 2137

mdn
2/3/05

Andrew Caldwell

ANDREW CALDWELL
SUPERVISORY PATENT EXAMINER